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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,513	10/03/2003	Werner Juengling	MI22-2391	1971
21567 7590 01/29/2007 WELLS ST. JOHN P.S.			EXAMINER	
601 W. FIRST	AVENUE, SUITE 1300)	KEBEDE, BROOK	
SPOKANE, WA 99201			ART UNIT	PAPER NUMBER
			2823	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		01/29/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
•	10/678,513	JUENGLING, WERNER				
Office Action Summary	Examiner	Art Unit				
	Brook Kebede	2823				
The MAILING DATE of this communication						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR I WHICHEVER IS LONGER, FROM THE MAILI - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communical - If NO period for reply is specified above, the maximum statutory - Failure to reply within the set or extended period for reply will, b Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMUN CFR 1.136(a). In no event, however, may a tion. period will apply and will expire SIX (6) MC y statute, cause the application to become a	IICATION. a reply be timely filed DNTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	26 October 2006.					
2a)⊠ This action is FINAL . 2b)□	This action is FINAL . 2b) This action is non-final.					
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 40-79 is/are pending in the app	lication.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>40-49,51-74 and 76</u> is/are allowed.						
6)⊠ Claim(s) <u>50 and 77</u> is/are rejected.	6)⊠ Claim(s) <u>50 and 77</u> is/are rejected.					
7) Claim(s) 75,78 and 79 is/are objected to						
8) Claim(s) are subject to restriction	and/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection	• • • • • • • • • • • • • • • • • • • •					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by	the Examiner. Note the attache	ed Office Action or form P1O-152.				
Priority under 35 U.S.C. § 119	•					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
	a not of the defining copies the	N TOOGITOU.				
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
Paper No(s)/Mail Date Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152) Other:						

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DETAILED ACTION

Claim Objections

1. Claims 49, 71, and 77 are objected to because of the following informalities:

Claim 48 recites the limitation "etching a doping window opening over a substrate" lines 6-7. The recited claim lacks clarity for the following reason:

The doping window opening is formed by etching the material. It is not clear how the opening itself can be etched.

Applicant also requested to review the limitations in claims 71 and 77 for the same issue as set forth above.

Applicant's cooperation is requested in reviewing the claims structure to ensure proper claim construction and to correct any subsequently discovered instances of claim language noncompliance. See *Morton International Inc.*, 28USPQ2d 1190, 1195 (CAFC, 1993).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 50 and 77 are rejected under 35 U.S.C. 102(e) as being anticipated by Jeng et al. (US/5,994,228).

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Re claim 50, Jeng et al. disclose a semiconductor processing method comprising: forming a conductive word line (117) over a substrate (100); forming a silicon nitride layer (121) over the word line (117); forming a silicon oxide layer (131) over the silicon nitride layer (121) (see Figs. 3b and 3c); forming encapsulation material (132 133) over the silicon oxide layer (131), the silicon nitride layer (121) and the conductive word-line (117); the encapsulation material forming sidewall spacers (123) adjacent the conductive word-line (117) selectively removing at least some of the encapsulation material (see Fig. 3d) relative to the silicon oxide layer (131); and selectively removing at least some of the silicon oxide layer relative to the layer wherein the selectively removing forms at least part of a silicon nitride contact opening over the word line (117) (see Figs. 3a – 3f; and related text in Col. 5, line 25 – Col. 6, line 67).

Re claim 77, Jeng et al. disclose a semiconductor processing method comprising: forming a conductive line (117 119) (i.e., polysilicon gate line) over a substrate (100), the conductive line (117) having a conductive portion (see Fig. 3) and silicon nitride material (121) over the conductive portion (117), and silicon oxide material (131) over the silicon nitride material (131) (see Fig. 3b) forming encapsulation material (132 133) over the conductive line (117); and in a common masking step (140) (see Fig. 3d), forming a doping window opening (170) over a substrate (100) active area adjacent the conductive line (117) and removing at least some of the encapsulation material (130) over the conductive line (117 119) and some of the silicon nitride material (121) over the conductive portion (117 119) of the conductive line (117) to form contact opening (160) to the conductive line; and providing a dopant impurity through the dopeing window opening into the substrate active area (117) (see Figs. 3a – 3f; and related text in Col. 5, line 25 – Col. 6, line 67).

Allowable Subject Matter

4. Claims 40-49, 51-74, and 76 allowed over prior art of record.

5. Claims 75, 78, and 79 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claim 77 have been considered but are moot in view of the new ground(s) of rejection.

With respect to claim 50, applicant's arguments are not persuasive because the spacers

123 as shown Figs. 3d are adjacent to the word line. Therefore, the rejection under 35 U.S.C 102 is deemed proper.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this

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final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the 8.

examiner should be directed to Brook Kebede whose telephone number is (571) 272-1862. The

examiner can normally be reached on 8-5 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matthew S. Smith can be reached on (571) 272-1907. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brook Kebede

Primary Examiner

BNOOK Kehrele

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BK

January 22, 2007